

3/29



ENTERED

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/068,137

DATE: 04/02/2002

TIME: 15:41:01

Input Set : A:\Serial No. 10 068,137 Sequence Listing.txt

Output Set: N:\CRF3\04022002\J068137.raw

```

3 <110> APPLICANT: Biopolo s.c.r.l.
5 <120> TITLE OF INVENTION: YEAST STRAINS FOR THE PRODUCTION OF LACTIC ACID
7 <130> FILE REFERENCE: 2027.547000
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/068,137
C--> 10 <141> CURRENT FILING DATE: 2002-02-06
12 <150> PRIOR APPLICATION NUMBER: ITALY MI97A002080
13 <151> PRIOR FILING DATE: 1997-12-09
15 <150> PRIOR APPLICATION NUMBER: PCT/EP98/05758
16 <151> PRIOR FILING DATE: 1998-09-11
18 <160> NUMBER OF SEQ ID NOS: 12
20 <170> SOFTWARE: PatentIn version 3.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 27
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <221> NAME/KEY: misc_feature
29 <222> LOCATION: ()..()
30 <223> OTHER INFORMATION: Oligomer anneals to inactivated ampicillin resistance gene of
pla
31      s
34 <400> SEQUENCE: 1
35 gttgccattg ctgcagggcat cgtggtg                               27
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 29
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <221> NAME/KEY: misc_feature
45 <222> LOCATION: ()..()
46 <223> OTHER INFORMATION: Oligomer anneals upstream of Bos taurus LDH gene in 5'UTR and
cre
47      a
50 <400> SEQUENCE: 2
51 ccttttaggggt ctagatccaa gatggcaac                               29
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 27
56 <212> TYPE: DNA
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <221> NAME/KEY: misc_feature
61 <222> LOCATION: ()..()
62 <223> OTHER INFORMATION: Oligomer anneals to 5' end of L. casei LDH gene and
introduces a

```

63 N
66 <400> SEQUENCE: 3

RAW SEQUENCE LISTING

DATE: 04/02/2002

PATENT APPLICATION: US/10/068,137

TIME: 15:41:01

Input Set : A:\Serial No. 10 068,137 Sequence Listing.txt

Output Set: N:\CRF3\04022002\J068137.raw

```

67 ccatggcaag tattacggat aaggatc 27
70 <210> SEQ ID NO: 4
71 <211> LENGTH: 24
72 <212> TYPE: DNA
73 <213> ORGANISM: Lactobacillus casei
75 <220> FEATURE:
76 <221> NAME/KEY: misc_feature
77 <222> LOCATION: ()..()
78 <223> OTHER INFORMATION: Antisense oligomer anneals 8 bp upstream of 3' end of L.
casei L
79 D
82 <400> SEQUENCE: 4
83 ctatcactgc aggggtttcga tgtc 24
86 <210> SEQ ID NO: 5
87 <211> LENGTH: 59
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <221> NAME/KEY: misc_feature
93 <222> LOCATION: ()..()
94 <223> OTHER INFORMATION: Oligomer complementary to S. cerevisiae PDC1 and anneals to
loxP
95 -
98 <400> SEQUENCE: 5
99 ttctactcat aacctcacgc aaaataacac agtcaaata cagctgaagc ttcgtacgc 59
102 <210> SEQ ID NO: 6
103 <211> LENGTH: 62
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <221> NAME/KEY: misc_feature
109 <222> LOCATION: ()..()
110 <223> OTHER INFORMATION: Antisense oligomer complementary to S. cerevisiae PDC1 and
annea
111 1
114 <400> SEQUENCE: 6
115 aatgcttata aaactttaac taataattag agattaaatc gcataggcca ctagtgatc 60
117 tg 62
120 <210> SEQ ID NO: 7
121 <211> LENGTH: 59
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <221> NAME/KEY: misc_feature
127 <222> LOCATION: ()..()
128 <223> OTHER INFORMATION: Oligomer complementary to S. cerevisiae PDC5 and anneals to
loxP
129 -
132 <400> SEQUENCE: 7
133 atcaatctca aagagaacaa cacaatacaa taacaagaag cagctgaagc ttcgtacgc 59
136 <210> SEQ ID NO: 8
137 <211> LENGTH: 62
138 <212> TYPE: DNA

```

RAW SEQUENCE LISTING

DATE: 04/02/2002

PATENT APPLICATION: US/10/068,137

TIME: 15:41:01

Input Set : A:\Serial No. 10 068,137 Sequence Listing.txt

Output Set: N:\CRF3\04022002\J068137.raw

```

139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <221> NAME/KEY: misc_feature
143 <222> LOCATION: ()..()
144 <223> OTHER INFORMATION: Antisense oligomer complementary to S. cerevisiae PDC5 and
anne
145      a
148 <400> SEQUENCE: 8
149 aaaatacacaca aacgttgaat catgagtttt atgttaatta gcataggcca ctagtggatc      60
151 tg                                                                                      62
154 <210> SEQ ID NO: 9
155 <211> LENGTH: 59
156 <212> TYPE: DNA
157 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <221> NAME/KEY: misc_feature
161 <222> LOCATION: ()..()
162 <223> OTHER INFORMATION: Oligomer complementary to S. cerevisiae PDC6 and anneals to
loxP
163      -
166 <400> SEQUENCE: 9
167 taaataaaaa acccacgtaa tatagcaaaa acatattgcc cagctgaagc ttcgtacgc      59
170 <210> SEQ ID NO: 10
171 <211> LENGTH: 62
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <221> NAME/KEY: misc_feature
177 <222> LOCATION: ()..()
178 <223> OTHER INFORMATION: Antisense oligomer complementary to S. cerevisiae PDC6 and
annea
179      l
182 <400> SEQUENCE: 10
183 tttatttgca acaataattc gtttgagtac actactaatg gcataggcca ctagtggatc      60
185 tg                                                                                      62
188 <210> SEQ ID NO: 11
189 <211> LENGTH: 59
190 <212> TYPE: DNA
191 <213> ORGANISM: Artificial Sequence
193 <220> FEATURE:
194 <221> NAME/KEY: misc_feature
195 <222> LOCATION: (1)..(2)
196 <223> OTHER INFORMATION: to be provided
199 <400> SEQUENCE: 11
200 acgcaacttg aattggcaaa atgggcttat gagacgttcc cagctgaagc ttcgtacgc      59
203 <210> SEQ ID NO: 12
204 <211> LENGTH: 62
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <221> NAME/KEY: misc_feature
210 <222> LOCATION: ()..().

```

RAW SEQUENCE LISTING

DATE: 04/02/2002

PATENT APPLICATION: US/10/068,137

TIME: 15:41:01

Input Set : A:\Serial No. 10 068,137 Sequence Listing.txt

Output Set: N:\CRF3\04022002\J068137.raw

211 <223> OTHER INFORMATION: Antisense oligomer complementary to S. cerevisiae PDC2 and
annea
212 1
215 <400> SEQUENCE: 12
216 agcctgtggtt accaggtaag tgtaagttat tagagtctgg gcataggcca ctagtggatc 60
218 tg 62

VERIFICATION SUMMARY

DATE: 04/02/2002

PATENT APPLICATION: US/10/068,137

TIME: 15:41:02

Input Set : A:\Serial No. 10 068,137 Sequence Listing.txt

Output Set: N:\CRF3\04022002\J068137.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date